

## ABSTRACT OF THE DISCLOSURE

An indicia for marking on an object, such as a cartridge case, for representing selected information, such as identification indicia identifying the firearm that discharged the cartridge, and methods and apparatus for generating, imprinting and reading the identification indicia. An indicia includes a multi-dimensional array of encoded marks, including encoded marks determined by spectral encoding variables representing the selected information wherein each spectral variable is spectrally distinguishable from others of the spectral variables representing variables, and an encoded pattern of the encoded marks is determined by algorithmic transformation of the selected information. An indicia may also include hologram related artwork. An indicia may be an encoded hologram multi-dimensional barcode, an encoded hologram or an encoded concentric circular barcode and may be formed of a single indicia or as an array of indicia.